

The NEAR Organizational Compassion Scale: validity, reliability and correlations

Dr Ace Volkmann Simpson

ace.simpson@uts.edu.au

UTS Business School, Management Discipline Group

University of Technology Sydney (UTS)

Dr Ben Farr-Wharton

benjamin.farr-wharton@uts.edu.au

UTS Business School, Management Discipline Group

University of Technology Sydney (UTS)

The NEAR Organizational Compassion Scale: validity, reliability and correlations

Abstract: *Organizational compassion research has been almost solely qualitative and constructivist in nature, making it difficult to establish or compare the concept's universality outside of influential case studies. Analysis of the literature suggests two related conceptualizations of organizational compassion: The first positions organizational compassion as a four-part process of noticing, empathising, assessing and responding (NEAR), which occurs at the interpersonal level (i.e. between colleagues). The second treats organizational compassion as single dimensional, higher order construct that positively affects employees work experience and organizational outcomes. This paper presents a quantitative psychometric tool to account for these related conceptualizations of organizational compassion. Validation of a quantitative organizational compassion measure constitutes a significant contribution to the literature that will open up many more research opportunities.*

Keywords: attitudes, emotions, group processes, interpersonal behaviour, organizational culture, values.

INTRODUCTION

Over the past decade and a half, compassion to address the suffering of colleagues within an organization has emerged as an area of organizational discourse evidenced in a growing number of academic and practitioner conferences, publications and even research centers (for overviews see Dutton & Workman, 2011; Dutton, Workman, & Hardin, 2014; Lilius, Kanov, Dutton, Worline, & Maitlis, 2012; Rynes, Bartunek, Dutton, & Margolis, 2012; Simpson, Clegg, & Pitsis, 2014a; Worline & Dutton, 2017). The literature has come to theorize organizational compassion as a four-part process of individual and collective (1) noticing, (2) interpreting, (3) feeling and (4) acting to alleviate the suffering of colleagues (Worline & Dutton, 2017). Taken together, this process constitutes a higher order construct representing practices of organizational compassion as perceived by an employee (Dutton, Workman & Hardin 2014). Antecedents facilitating these practices include a shared mission and values as well as an ethic of care (Dutton, Lilius, & Kanov, 2007; Dutton & Workman, 2011). Beneficial outcomes of organizational compassion include enhanced positive affectivity, connectivity, greater organizational citizenship and enhanced well-being (Dutton, Worline, Frost, & Lilius, 2006; Simpson, Cunha, & Rego, 2015a). Organizational compassion research tends to be qualitative in nature and a recognized important next step in developing the knowledge of organizational compassion is to test the current models and findings using quantitative research methodologies, beginning with developing a valid and reliable measure of organizational compassion (Worline & Dutton, 2017). This paper undertakes such a step.

**Stream 11. Organisational Behaviour
Refereed Delivered**

We structure the paper as follows: First we provide an overview of the organizational compassion literature, including discussing its justification, the development of consensus definitions of the construct, and findings relating to its organizational antecedents and beneficial outcomes. At the conclusion of the literature review we articulate three hypotheses tested in this study. We then describe our methodology: Initially we explain the iterative process undertaken to develop the questions for the measure and the criteria used for screening participants. In the findings section we show the results of a split-sample scale validation using exploratory and confirmatory factor analysis to establish the four-part process (factor) model. In a second analysis, we model the four factors as a higher order construct representing organizational compassion, and examine relevant antecedents and consequences. We discuss the significance and implications of these findings for theory and practice.

Organizational Compassion

A lay practitioner or naïve researcher might intuitively conceive of organizational compassion as the sum of the actions of individuals who are compassionate in their psycho-emotional dispositions. Compassion at the organizational level is more than just an individual emotion, it is a group process enacted in a socio-political context influenced by relational networks, cultural values, systems, routines, work roles and leadership behaviours (Simpson, Clegg, & Pitsis, 2014b; Worline & Dutton, 2017). Organizational elements contribute towards facilitating or inhibiting individual level compassion practices. Accordingly, while cultivating compassion of at the individual level within organizations is important for awakening compassion in workplaces, it is insufficient (Dutton et al., 2006). What is most essential is paying attention to the socio-material organizational structures, systems and processes that (de)legitimise compassion as an organizational value and practice (Simpson, Cuhuna, & Clegg, 2015). The objective of this study is to develop a measure of collective organizational compassion capabilities.

Defining Organizational Compassion

Kanov et al. (2004) initially theorized a three-part definition of organizational compassion with cognitive, affective and behavioural dimensions as a collective process of recognizing, feeling, and responding to another's suffering. This definition emerged as the consensus, being cited in numerous publications (see Dutton et al., 2007; Dutton et al., 2006; Frost et al., 2006; Lilius et al., 2012; Lilius,

Stream 11. Organisational Behaviour
Refereed Delivered

Worline, Dutton, Kanov, & Maitlis, 2011; Lilius et al., 2008; Rynes et al., 2012). Responding to findings that the giving and receiving of organizational compassion also includes rational-political appraisals (Atkins & Parker, 2012) of the motivations and legitimacy of a compassion actor (Simpson et al., 2014b), Dutton, Workman and Hardin (2014) updated the dominant definition by adding the relational and rational component of mutual sensemaking. Today organizational compassion is defined as “an interpersonal process involving the noticing, feeling, sensemaking, and acting that alleviates the suffering of another person” (Dutton et al. 2014, p. 277). These authors posit organizational compassion as a four-part process where sensemaking (assessing or interpreting) provides the context in which collective and individual noticing (becoming aware), empathizing (identifying with the suffering) and responding unfold (not necessarily in that sequential order). We seek to operationalize this process with a proposed NEAR model, positing that Noticing a colleague’s suffering and Assessing (rational interpretations of the suffering, its causes, the deservedness of the sufferer and degree and type of support that should be extended) is further mediated through Empathising (feeling) with their pain ,and enacted as specific acts of Responding (by providing support or not) .We model this NEAR process (Figure 1), hypothesizing that noticing, empathising and assessing are a covaried process that inform practices of responding (hypothesis 1) (Figure 1).

Insert Figure 1 about here

Organizational compassion is also frequently discussed as a single dimension state (rather than a subroutine/process), transcending the interpersonal and breaching into organizational practices and norms. For example, Cameron et al’s (2004; 2012) studies of virtuous organizations found that the value of compassion contributes towards higher corporate productivity and profitability and customer retention. Similarly Lilius et al. (2008, p. 196) studied “experienced compassion at work”, using a three item measure. We seek to operationalize theorization of organizational compassion as a single dimension by positing that the NEAR constructs (noticing, empathizing, assessing and responding) combine together into a higher-order organizational compassion composite, which affects, and is affected by organizational level outcomes. Thus, we hypothesize that organizational compassion may also operate as a higher-order variable comprised of the lower-order NEAR constructs of noticing,

empathizing, assessing and responding (hypothesis 2) (Figure 2).

Insert Figure 2 about here

Perceived Organizational Support as an antecedent of Organizational Compassion

Organizational compassion as a response to employee suffering is distinct from but related to an ethic of care focused on providing employees general support in the day-to-day workplace context irrespective of whether or not they are suffering: “care as an ongoing, central dimension of relationships, regardless of the suffering or the flourishing being experienced” (Lawrence & Maitlis, 2012, p. 642). Simpson et al. (2013; 2015b) report in their study of organizational compassion during a flood crisis that those organizations with a culture of care and support in their routine practices were more likely to respond compassionate support for their employees during the crisis. Other research similarly concludes that compassion is heavily influenced by an organization’s propensity to put in place employee-centered support programs and policies including flexible work arrangements, institutional support during difficult times (for example with sponsored counselling, or paid bereavement or parental leave), and harm notification hotlines (Dutton et al., 2007; Dutton & Workman, 2011). We seek to test these findings by quantitatively measuring the relationship between organizational compassion and Perceived Organizational Support (POS), a well-established central construct of social exchange theory (Cropanzano & Mitchell, 2005). The primary tenant of POS is that when the membership (particularly leaders) present within organization engage in positive interactions that value employees, employees reciprocate with positive discretionary behaviour, performance and commitment. We operationalize these conclusions by hypothesizing that POS is: an antecedent to organizational compassion, and a distinguishable construct in its own right (hypothesis 3a).

Organizational Compassion consequences: Organizational Citizenship Behaviour and Well-being

Research suggests many beneficial outcomes of organizational compassion, both for the employees and the organization’s where they work. Organizational compassion has been found in qualitative studies to enhance workplace connectivity leading to quality interpersonal connections, team relations and citizenship (Dutton et al., 2007; Dutton et al., 2006; Simpson, Cunha, et al., 2015a). We test these

Stream 11. Organisational Behaviour
Refereed Delivered

findings by positing that they suggest a positive association between organizational compassion and the broader construct of Organizational Citizenship Behaviour (OCB). OCB comprises individual and organisational discretionary behaviour in support of colleagues and the organisation. Such support is altruistic, courteous and conscientious (Williams & Anderson, 1991). We hypothesise that organizational compassion is positively associated with OCB (hypothesis 3.b.), as employees who perceive their workplace to be compassionate and supportive, are likely to reciprocate with positive interpersonal and organisational discretionary actions, covered broadly under the banner of OCB. Research has also found that organizational compassion facilitates individual and collective post-trauma healing after tragic events (Lilius et al., 2011; Powley & Cameron, 2006), such as the terrorist attack on the World Trade Centre in New York City on 9/11 2003 (Dutton, Frost, Worline, Lilius, & Kanov, 2002), and boosts positive affectivity creating upward spirals of shared trust, pride and motivation at work (Dutton et al., 2006). We seek to operationalize these findings by testing the relationship between organizational compassion and employee well-being. Employee well-being comprises the level of satisfaction an employee has with the tangible and intangible organizational processes and practice (Grant et al, 2007; Brunetto, et al. 2011). The construct has become a popular catch-all barometer indicating the overall status of how employees feel about their work and workplace at a given time. We hypothesise a positive relationship between POS, OCB, organizational compassion and employee well-being (hypothesis 3.C) (Figure 3).

Insert Figure 3 about here

METHODOLOGY

Scale Development

The contribution that this paper seeks to offer concerns the development of a robust organizational compassion scale constructed from the theoretical propositions derived from previous qualitative work. Hinkin's (1998) scale development framework was used as a guide to inform the development of items under each of organizational compassion's lower-order NEAR constructs. Hinkin's first recommendation is to ascertain whether a construct can be effectively measured with an existing, validated scale. While there are scales that seek to account for compassion as a component of virtuous

**Stream 11. Organisational Behaviour
Refereed Delivered**

organizational action (Cameron et al., 2004; Cameron, Mora, Leutscher, & Calarco, 2011), or as general organizational practice (that has not been tested for validity and reliability) (CompassionLab & Greater Good Science Centre, n.d.), to date, no scale exists that captures the four-part process proposed by Dutton, Workman and Hardin (2014). Our objective was to develop a set of scales to capture these NEAR subconstructs.

With access to international scholars conducting research in organizational compassion, and to a broad variety of both students and members of the public who were interested in the research, we were fortunate to be able to get regular expert feedback on the content validity of our items, in addition to undertaking a number formative pilot survey tests. In total, our scale development underwent four pilot iterations with samples of just under $n=200$, whereupon content, estimated factor loadings and instrument reliability could be assessed. Our final iteration utilized between six and nine items per NEAR construct, and was administered via an online survey by a reputable panel data company. The 6-point likert scale used was universal for all items, where 1 was strongly disagree, 2 was disagree, 3 was slightly disagree, 4 was slightly agree, 5 was agree and 6 was strongly agree. Research suggests that organizational compassion more likely flourishes in employee centred work environments characterized by employee empowerment, flexible work arrangements, flatter structures and initiatives for employee support during difficult times (Dutton et al., 2007; Dutton & Workman, 2011; Dutton et al., 2014), conditions typical of post-bureaucratic organizations populated by knowledge workers (Josserand, Teo, & Clegg, 2006; McKenna, Garcia-Lorenzo, & Bridgman, 2010). Accordingly, the conditions selected for a valid survey response in this study were that the respondent was a knowledge worker (they worked in an office with other people, possessed university education, and undertook non-routine, problem-solving tasks as part of their job), that they were not a robot, and that they completed the 76-itemed survey (including other constructs) in no less than four minutes (the average time it took our pilot respondents). Of the 2311 people who clicked on the survey, 334 respondents met all of these conditions. The organizational characteristics represented by our respondents (industries, number of employees, and hours worked) are presented in Table 1.

Insert Table 1 about here

Stream 11. Organisational Behaviour
Refereed Delivered

To validate the scales we undertook sequential exploratory and confirmatory factor analysis (EFA and CFA respectively) with the total sample of $n=334$, and a randomly split sample of $n=175$. The purpose for a random split comparison is ensuring that the factors load in a consistent manner after establishing a baseline threshold sample. As the NEAR factors being assessed were conceptualised as lower-order variables of the higher order construct of organizational compassion (with expected high correlations between factors), our EFA utilized principal axis factoring with promax rotation and coefficients below .4 suppressed. This produced four clear NEAR factors for both the split and full sample iterations. The next step involved removing items that had poor factor loadings (below .6 as recommended by Hair et al. 2010). The four factor model was retained in the EFA for both the split and full sample iterations, with an item per construct ratio above the 4:1 ratio suggested by Hair (1998) (Table 2).

Insert Table 2 about here

To conduct CFA analysis, to assess multicollinearity and item reliability, the items and constructs were modeled in the AMOS structural equation modeling program. The original model fit indices for the full sample model derived from the EFA was chi-square over degrees of freedom (CMIN/DF) = 3.114***, a corrected fit index (CFI) of .944, a Tucker-Lewis Index (TLI) of .935 and a root mean square estimation (RMSEA) of .080, all of which fall slightly outside of optimal specifications as perscribed by Ping (2004), and Hair et al. (2010). To implement modification covarieances between items and determine which arrangement had the best overall model fit properties each construct was next examined individually, and within the context of its covaried constructs, for both the split and the full samples. Noting that the items within each lower-order construct were likely to have high covariance properties, a total of six covariances were assigned; these are noted on the final factor-item table in the Appendix. This process enhanced the model fit indices somewhat with the CMIN/DF = 2.479***, with a CFI of .962, a TLI of .955 and a RMSEA of .067. For the split sample the CMIN/DF = 1.976 ***, with a CFI of .953, a TLI of .945 and a RMSEA of .075. This model was used to assess reliabiltiy and interclass correlations (multicollinearity testing) between the constructs. The model

displayed no threat of multicollinearity, and the composite reliability, average variance extracted and maximum squared variance were all robust and within acceptable ranges (see Table 3).

Insert Table 3 about here

Analysis

Hypothesis 1 and 2: The Holmes-Smith and Rowe (1994) method for developing composite variables which are constrained to the properties of the latent-variable model test was used to test hypotheses 1 and 2. Holmes-Smith and Rowe note that a major limitation of traditional model testing using structural equation modeling (SEM), is that more items often yields weaker model fit outcomes. This is problematic for the central tenant of psychometric theory posits that the more items representing a construct used in analysis, the stronger the content validity (Hinkin, 1998). Too many items, however, makes it difficult to fit the model, and the results become open to challenge. To resolve this, the Holmes-Smith and Rowe (1994) technique recommends using the factor scores of a multi-item latent variable to calculate an observed composite variable, which is then loaded onto a new, one-item latent variable in SEM. Using the coefficient H reliability of the composite variable and its standard deviation, the error and variance of the latent variable is constrained so that it mirrors the properties of the original multi-item latent variable. By conducting this process after the validity and reliability of a construct has been established, fewer degree of freedom are required in SEM calculations, however, the original structural properties of a model are retained. This means that model fit indices are typically more robust, providing more reliable statistical results. The Holmes-Smith and Rowe (1994) technique was used to develop models to test hypothesis 1 and 2, and the results of this process are presented below in the findings section.

Hypotheses 3a.b.c: Analysis and Measures: To test hypotheses 3a.b. and c. concerning the relationship between organizational compassion and Positive Organizational Support (POS), Organizational Citizenship Behaviour (OCB), and employee well-being, we used well established measures of these constructs. POS was measured utilising a shorednted 6-item scale developed by Eisenberger et al. (1997). Scale items included: *the organization I work for would not take advantage of me*, and *help is available from the organization that I work for when I have a problem*. For OCB we

Stream 11. Organisational Behaviour
Refereed Delivered

used a shortened 8-item scale from Williams and Anderson (1991). Items included: *I go out of my way to be nice to my coworkers, and I go above and beyond what is required at my work*. Employee well-being was measured using a 4-item scale by Brunetto et al. (2011) with items such as: *Overall, I am reasonably happy with my work life, and Most days I feel a sense of accomplishment in what I do at work*. Instrument reliability and multicollinearity analysis was conducted to for the constructs used in the hypotheses 3 model, including the organisational compassion higher order variable, POS, OCB and employee well-being. The interclass correlations displayed no evidence of multicollinearity, and the composite reliability, average variance extracted and maximum shared variance scores were all within acceptable thresholds (see Table 4). This analysis also provides evidence that POS is empirically distinguished from organisational compassion.

Insert Table 4 about here

To test the third hypothesised model, as with hypothesis 1 and 2, the Holmes-Smith and Rowe (1994) method of developing composite variables constrained to represent the properties of the latent variable structure was used. The results are displayed in the following section.

Control Variable: For all three hypothetical models, the number of hours of employment per week was used as a control variable.

FINDINGS

Hypotheses

Hypothesis 1: Using the Holmes-Smith and Rowe (1994) method, the final model fit scores of the first hypothetical model were robust, with an insignificant ($p=.580$) chi-square of degrees of freedom = .654, a corrected fit index of 1, a tucker-lewis index of 1.005 and a root mean square estimation of .0 (Figure 4).

Insert Figure 4 about here

Mediation testing was undertaken using the 95% confidence bias corrected bootstrapping technique at $n=4000$. Assessing and noticing mediated each other's relationship to empathising ($p=.000$), and empathising mediated the relationship between noticing and assessing and responding ($p=.001$), finding support for hypothesis 1.

Stream 11. Organisational Behaviour
Refereed Delivered

Hypothesis 2: Organizational compassion was modelled as a higher-order variable composed of the NEAR subconstructs. The modification index indicated the model would benefit from a covariances linking the error of assessing and empathising. Accordingly, as the organizational compassion literature suggests that these constructs are highly correlated, this covariance was added. Using the Holmes-Smith & Rowe (1994) technique, the model had very good fit with an insignificant ($p=.414$) CMIN/DF = .667, a CFI of 1, a TLI of 1.003 and a RMSEA of .000 (Figure 5).

Insert Figure 5 about here

As noted above, the composite reliability of the organisational compassion factor was .898, providing support for hypothesis 2 by indicating a robust higher-order construct.

Hypotheses 3: The interactions between POS, organisational compassion, OCB and employee well-being were modelled, again using the Holmes-Smith & Rowe (1994) technique to establish robust composite variables. The final model had very good fit with an insignificant ($p=.157$) CMIN/DF = 1.350, a CFI of .996, a TLI of .993 and a RMSEA of .032 (Figure 6).

Insert Figure 6 about here

To examine the mediation effect of organizational compassion and OCB on employee well-being we again ascertained the indirect bootstrapped significance using a bias correct 95% confidence level for $n=4000$. Organizational compassion significantly mediated the relationship between POS and OCB ($p=.000$), while OCB and organizational compassion significantly mediated the relationship between POS and well-being ($p=.001$ for both items).

DISCUSSION AND CONCLUSIONS

The findings of support for the hypotheses tested in this study validate research on organizational compassion that has emerged over the past couple of decades. First, the findings support theorising organizational compassion as a four-part collective NEAR process (Dutton et al., 2014) (hypothesis 1). Second, the findings also support theorising organizational as a higher order organizational disposition (Cameron et al., 2004; Cameron & Winn, 2012) (hypothesis 2). Third, the findings also provide support for theorising related to some of the antecedents and consequences of organizational compassion tested in hypotheses 3.a, b and c. Organizational compassion scholars maintain that

Stream 11. Organisational Behaviour
Refereed Delivered

organizational compassion is distinct from other positive practices such as providing support or kindness, in that it is a response to suffering (Worline & Dutton, 2017). However, they also argue that organizational systems of support and a culture of care are important antecedents of compassion in times of distress (Simpson et al., 2013; Simpson, Cunha, et al., 2015b). In support of this theorising the current study found POS to be both distinct from organizational compassion as well as a significant antecedent of organizational compassion (hypothesis 3.a). The consequences of organizational compassion have been identified as including benefits of enhanced employee commitment, engagement, loyalty and trust towards the organization as well as enhanced positive affectivity and wellbeing (Dutton et al., 2007; Dutton et al., 2006; Lilius et al., 2011; Simpson, Cunha, et al., 2015a). In support of these earlier conclusions the current study found positive associations between OCB (hypothesis 3.b) and well-being (3.c).

The NEAR Organizational Compassion Scale can be used to provide practical feedback to leaders, managers and change agents on current organizational compassion competencies for noticing, empathising, assessing and responding to employee suffering. Feedback in each of the NEAR areas can indicate areas of strength that can be leveraged further, as well as areas of weakness where systems can be devised to further develop the organization's compassion capabilities.

As with all research there are limitations to the current study. One limitation is that the questions related to assessing within the scale are limited to the perspective of the compassion giver. Future research could further develop this scale by accounting for assessing as a mutual interpersonal process where givers and receivers both make sense of each other's intentions, motivations and behaviours within the compassion relation (Dutton et al., 2014; Simpson et al., 2014b). Another limitation is that the study relies on responses from an online survey of respondents within a specific cultural context. Future research could test the proposed scale within single organizational contexts, as well as within varied cross-cultural contexts. Such studies would test the reliability of the scale and provide benchmarks within different contexts. The scale has the potential for opening up numerous other research opportunities. For example, research suggests that leadership practices of modelling compassion behaviours and mobilising resources as a response to employee suffering have a symbolic

Stream 11. Organisational Behaviour
Refereed Delivered

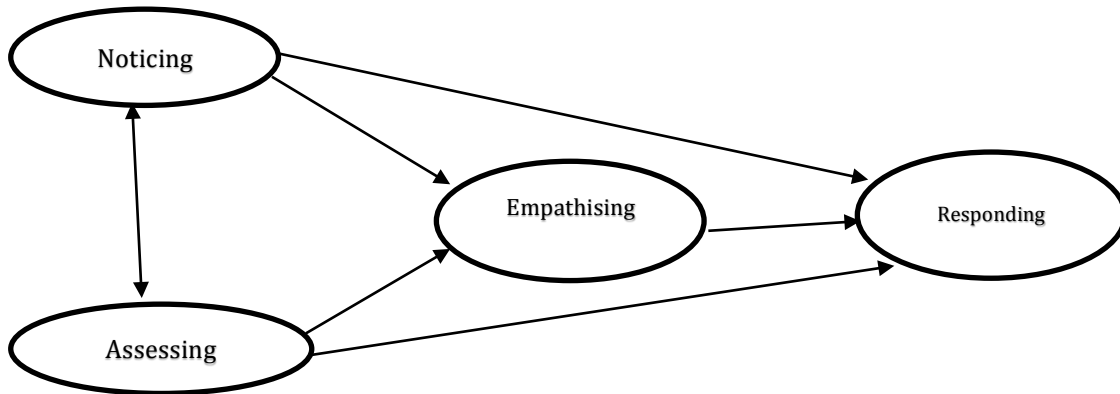
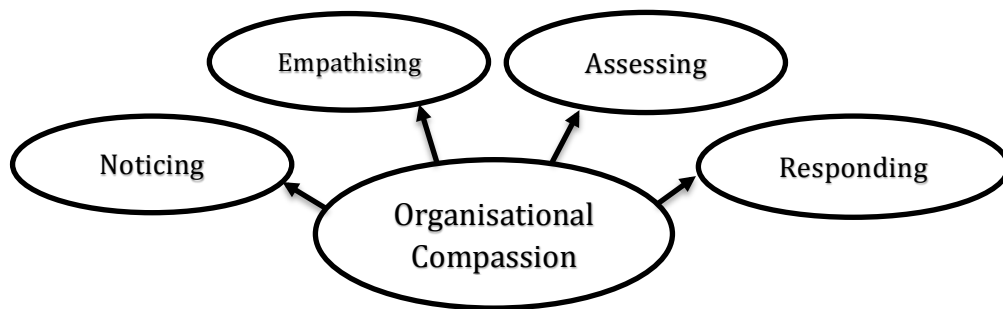
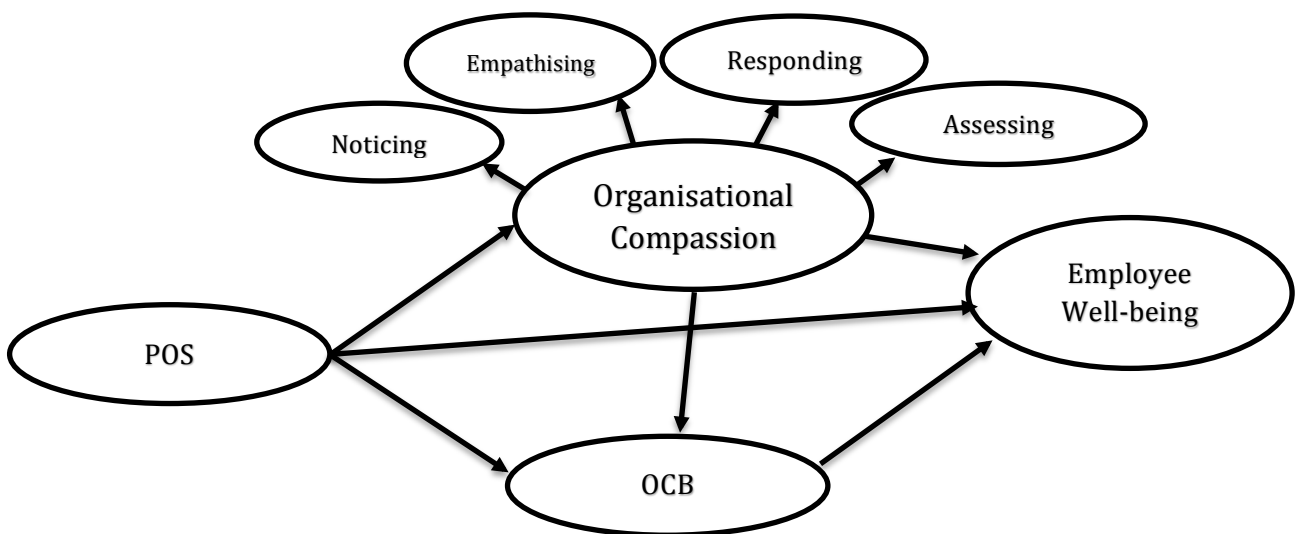
influence on compassion responses within the organization more broadly (Dutton et al., 2002; Dutton et al., 2006). The current tool could be used to test those associations.

References

- Atkins, P. W., & Parker, S. K. (2012). Understanding individual compassion in organizations: The role of appraisals and psychological flexibility. *Academy of Management Review*, 37(4), 524-546.
- Brunetto, Y., Farr-Wharton, R., & Shacklock, K. (2011). Using the Harvard HRM model to conceptualise the impact of changes to supervision upon HRM outcomes for different types of Australian public sector employees. *International Journal of Human Resource Management*, 22(03), 553-573.
- Cameron, K. S., Bright, D., & Caza, A. (2004). Exploring the relationships between organizational virtuousness and performance. *American Behavioral Scientist*, 47(6), 766-790.
- Cameron, K. S., Mora, C., Leutscher, T., & Calarco, M. (2011). Effects of positive practices on organizational effectiveness. *The journal of applied behavioral science*, 47(3), 266-308.
- Cameron, K. S., & Winn, B. (2012). Virtuousness in organizations. In K. S. Cameron & G. Spreitzer (Eds.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 231-243). Oxford: Oxford University Press.
- CompassionLab, & Greater Good Science Centre (Producer). (n.d., 27 May 2017). Compassionate Organizations Quiz: Does your organization foster compassion or callousness? Retrieved from http://greatergood.berkeley.edu/quizzes/take_quiz/11
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Dutton, J. E., Frost, P., Worline, M. C., Lilius, J. M., & Kanov, J. M. (2002). Leading in times of trauma. *Harvard business review*, 80(1), 54-61.
- Dutton, J. E., Lilius, J. M., & Kanov, J. M. (2007). The transformative potential of compassion at work. In S. K. Piderit, R. E. Fry, & D. L. Cooperrider (Eds.), *Handbook of transformative cooperation: New designs and dynamics* (pp. 107-124). Stanford: Stanford University Press.
- Dutton, J. E., & Workman, K. M. (2011). Compassion as a generative force. *Journal of Management Inquiry*, 20(4), 402-406.
- Dutton, J. E., Workman, K. M., & Hardin, A. E. (2014). Compassion at work. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 277-304.
- Dutton, J. E., Worline, M. C., Frost, P. J., & Lilius, J. (2006). Explaining compassion organizing. *Administrative science quarterly*, 51(1), 59-96.
- Eisenberger, R., Cummings, J., Aemeli, S., & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, 82(5), 812-820.
- Frost, P. J., Dutton, J. E., Maitlis, S., Lilius, J. M., Kanov, J. M., & Worline, M. C. (2006). Seeing organizations differently: Three lenses on compassion. In S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), *The Sage handbook of organization studies* (pp. 843-866). London: Sage.
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7): Pearson Upper Saddle River, NJ.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational research methods*, 1(1), 104-121.
- Holmes-Smith, P., & Rowe, K. J. (1994). *The development and use of congeneric measurement models in school effectiveness research: Improving the reliability and validity of composite and latent variables for fitting multilevel and structural equation models*. Paper presented at the International Congress for School Effectiveness and Improvement, Melbourne.
- Josserand, E., Teo, S., & Clegg, S. R. (2006). From bureaucratic to post-bureaucratic: the difficulties of transition. *Journal of Organizational Change Management*, 19(1), 54-64.
doi:10.1108/09534810610643686
- Kanov, J. M., Maitlis, S., Worline, M. C., Dutton, J. E., Frost, P. J., & Lilius, J. M. (2004). Compassion in organizational life. *American Behavioral Scientist*, 47(6), 808-827.

**Stream 11. Organisational Behaviour
Refereed Delivered**

- Lawrence, T., & Maitlis, S. (2012). Care and possibility: Enacting an ethic of care through narrative practice. *Academy of Management Review*, 37(4), 641-663.
- Lilius, J. M., Kanov, J. M., Dutton, J. E., Worline, M. C., & Maitlis, S. (2012). Compassion revealed: What we know about compassion at work (and where we need to know more). In K. S. Cameron & G. Spreitzer (Eds.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 273-287). Oxford: Oxford University Press.
- Lilius, J. M., Worline, M. C., Dutton, J. E., Kanov, J. M., & Maitlis, S. (2011). Understanding compassion capability. *Human relations*, 64(7), 873-899.
- Lilius, J. M., Worline, M. C., Maitlis, S., Kanov, J. M., Dutton, J. E., & Frost, P. J. (2008). The contours and consequences of compassion at work. *Journal of Organizational Behavior*, 29(2), 193-218.
- McKenna, S., Garcia-Lorenzo, L., & Bridgman, T. (2010). Managing, managerial control and managerial identity in the post-bureaucratic world. *Journal of Management Development*, 29(2), 128-136. doi:10.1108/02621711011019260
- Ping, R. A. (2004). On assuring valid measures for theoretical models using survey data. *Journal of Business Research*, 57(2), 125-141.
- Powley, E. H., & Cameron, K. S. (2006). Organizational healing: Lived virtuousness amidst organizational crisis. *Journal of Management, Spirituality & Religion*, 3(1-2), 13-33.
- Rynes, S., Bartunek, J., Dutton, J., & Margolis, J. (2012). Care and compassion through an organizational lens: Opening up new possibilities. *Academy of Management Review*, 37(4), 503-523.
- Simpson, A. V., Clegg, S., & Cunha, M. P. (2013). Expressing compassion in the face of crisis: Organizational practices in the aftermath of the Brisbane floods of 2011. *Journal of Contingencies and Crisis Management*, 21(2), 115-124.
- Simpson, A. V., Clegg, S., & Pitsis, T. (2014a). "I used to care but things have changed": A genealogy of compassion in organizational theory". *Journal of Management Inquiry*, 23(4), 347-359.
- Simpson, A. V., Clegg, S., & Pitsis, T. (2014b). Normal compassion: A framework for compassionate decision making. *Journal of Business Ethics*, 119(4), 473-491.
- Simpson, A. V., Cunha, M. P., & Clegg, S. (2015). Hybridity, sociomateriality and compassion: What happens when a river floods and a city's organizations respond? *Scandinavian Journal of Management*, 31(3), 375-386.
- Simpson, A. V., Cunha, M. P., & Rego, A. (2015a). Compassion in the context of capitalistic organizations: Evidence from the 2011 Brisbane floods. *Journal of Business Ethics*, 130(3), 683-703.
- Simpson, A. V., Cunha, M. P., & Rego, A. (2015b). *Organizational stewardship and compassion in the 2011 Brisbane Floods*. Paper presented at the European Group for Organizational Studies, Athens, Greece.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601-617.
- Worline, M., & Dutton, J. E. (2017). *Awakening compassion at work: The quiet power that elevates people and organizations*: Berrett-Koehler Publishers.

Figure 1: Organizational compassion process hypothetical model.**Figure 2:** Organizational compassion as a higher order construct.**Figure 3:** Associations proposed under hypothesis 3 (a. b. & c).

Stream 11. Organisational Behaviour
Refereed Delivered

Figure 4: Final model fit scores of the first hypothetical model.

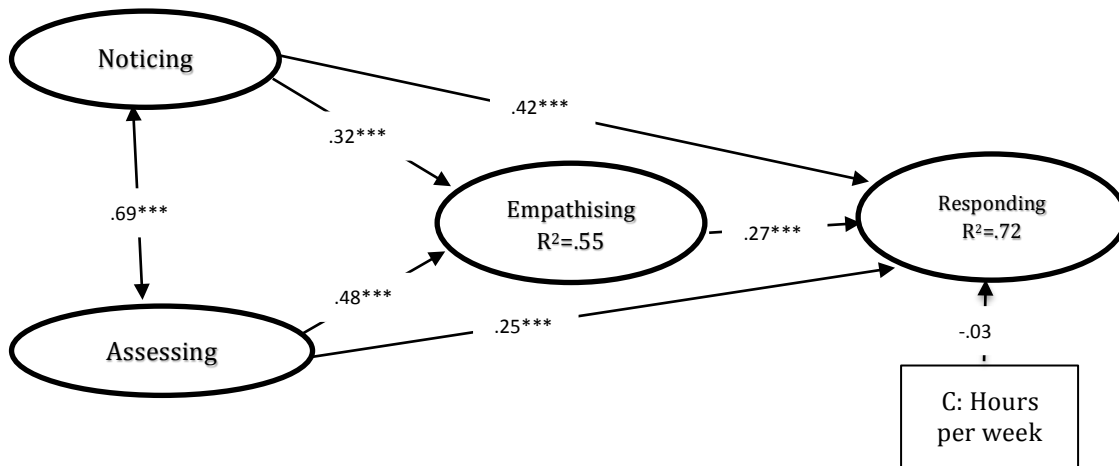


Figure 5: Composite reliability of the organisational compassion factor was .898, indicating a robust higher-order construct.

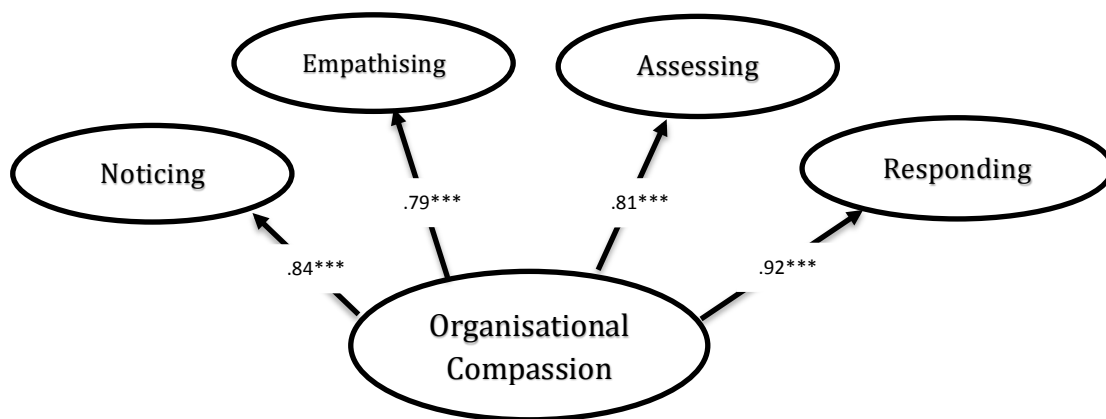


Figure 6: Interactions between POS, organisational compassion, OCB and well-being show good fit.

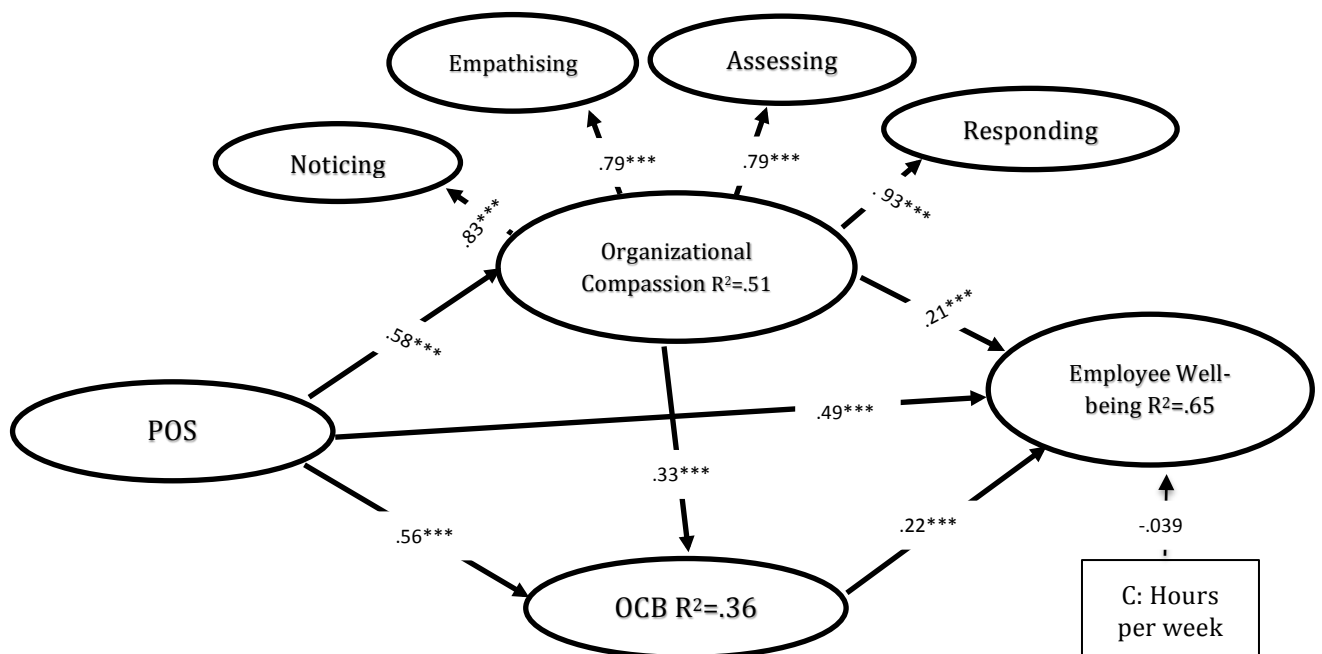


Table 1: Respondent workplace characteristics.

Factor	Categories	Per-cent
Industries represented		
	Retail services	31
	Finance, banking and insurance	23
	Health and aged care	8
	Education	6
	Information technology	5
	Commerce and marketing	5
	Construction and engineering	4
	Social services	3
	Transport and logistics	3
	Manufacturing	3
	Creative industries	3
	Law	2
	Agriculture	2
	Mining	2
Number of employees in organizations represented		
	More than 1000	17
	Between 101-1000	24
	Between 51-100	20
	50 or less	28
Number of hours worked by respondents		
	More than 35	70
	15 to 34	24
	14 or less	6

Table 2: Item per construct ratio.

Construct	Number of items
Noticing	6
Empathising	5
Assessing	4
Responding	6
Total:	21 items

Stream 11. Organisational Behaviour
Refereed Delivered

Table 3: Reliability and interclass correlations (multicollinearity testing) between the constructs.

Construct	Composite Reliability (acceptable >.7)	Average Variance Extracted (AVE) (acceptable >.5)	Maximum shared variance (acceptable when lower than AVE)
Noticing	.938	.752	.491
Empathising	.908	.665	.555
Assessing	.906	.708	.566
Responding	.954	.776	.566

Table 4: Interclass correlations for organizational compassion, POS, OCB and Well-being.

Construct	Composite Reliability (acceptable >.7)	Average Variance Extracted (AVE) (acceptable >.5)	Maximum shared variance (acceptable when lower than AVE)
Organizational Compassion	.898	.746	.454
POS	.955	.724	.650
OCB	.934	.590	.389
Employee Well-being	.917	.735	.650

Appendix: Organizational Compassion Scale.

Construct Questions		Strength
Noticing		
<i>When someone is suffering in my organization, others tend to...</i>		
1. ...Notice the signs (covaried with item 6)		.890
2. ...Recognize the distress (covaried with item 5)		.886
3. ...Pay attention		.871
4. ...Identify the indicators		.859
5. ...Sense the suffering		.831
6. ...Become aware		.823
Empathising		
<i>When someone is suffering in my organization, others tend to...</i>		
1. ...Connect with the pain (covaried with item 2)		.858
2. ...feel their co-worker's suffering		.854
3. ...feel the distress as their own		.840
4. ...Become emotionally invested (covaried with item 5)		.763
5. ...Feel distressed and challenged by the situation		.750
Assessing		
<i>When someone is suffering in my organization, others tend to...</i>		
1. ...Seek to understand if the co-worker is able to help themselves		.889
2. ...assess the prior circumstances leading to the co-worker's suffering		.875
3. ...assess if the co-worker had prior warning		.852
4. ...assess the co-worker's level of responsibility for their distress		.741
Responding		
<i>When someone is suffering in my organization, others tend to...</i>		
1. ...Take practical steps		.916
2. ...Respond (covaried with item 5)		.910
3. ...Take action		.892
4. ...Address the distress		.890
5. ...Get involved (covaried with item 6)		.866
6. ...Champion the cause		.803